INVENTORY CONTROL SYSTEMS

SPECIFIC OUTCOMES

Prepare the following ledger accounts in general ledger:

Trading stock account

Creditors allowances

Purchases account

Carriage on purchases

Trading account

- Calculate the **cost of sales** from given information.
- Calculate the **gross profit** from given information.
 - Differentiate between the periodic inventory system and the continuous inventory system by preparing certain ledger accounts.

1. WHAT TO REMEMBER

- There is no continuous recording of the trading stock movements.
- It is not possible to continuously ascertain from the bookkeeping itself e.g. from the Trading stock account- what the trading stock on hand should be.

2. FEATURES OF THE PERIODIC INVENTORY SYSTEM

- Purchases of merchandise / trading stock is recorded to purchases account, a nominal account and not to trading stock account.
- Carriage on merchandise / trading stock is recorded to carriage on purchases account, a nominal account and not to trading stock account.
- Returns and allowances on purchased merchandise / trading stock is recorded on the credit side of credit allowances account and not to trading stock account. The credit allowances account is then closed off to the purchases account to calculate the net purchases.
- **Drawings** of merchandise / trading stock at cost for personal use by the owner is credited to **purchases account** and not to a trading stock account.

- Donation of merchandise / trading stock at cost is credited to purchases account and not to trading stock account.
- in order to determine the cost of sales a calculation has to be made:

Initial / Opening stock	XXX
Add: Net purchases (purchases - creditors allowances)	XXX
Add: Carriage on purchases	XXX
Cost of goods available to be sold	\overline{XXX}
Less: Final / Closing stock	(XXX)
Cost of sales	XXX
Sales (net)	XXX
Cost of sales	(XXX)
Gross profit	XXX

SUMMARISED COMPARISON OF THE CONTINUOUS AND PERIODIC INVENTORY SYSTEMS.

The following is a comparison of the entries in the general ledger of the two systems.

Transaction	Continuous inventory system	Periodic inventory system	
Credit purchases of	Debit Trading stock	Debit Purchases	
merchandise	Credit Creditors control	Credit Creditors control	
Cash purchases of	Debit Trading stock	Debit Purchases	
merchandise	Credit Bank	Credit Bank	
Merchandise returned to	Debit Creditors control	Debit Creditors control	
suppliers (purchases returns)	Credit Trading stock	Credit Creditors allowances	
Carriage on purchases	Debit Trading stock	Debit Carriage on purchases	
	Credit Bank (or creditors control If on credit)	Credit Bank (or creditors control If on credit)	
Donation of merchandise	Debit Donations	Debit Donations	
	Credit Trading stock	Credit Purchases	
Withdrawal of merchandise at	Debit Drawings	Debit Drawings	
cost	Credit Trading stock	Credit Purchases	

Credit sales of merchandise	Debit Debtors control	Debit Debtors control		
	Credit Sales	Credit Sales		
	Debit Cost of sales			
	Credit Trading stock			
Merchandise returned by	Debit Debtors allowances	Debit Debtors allowances		
customers (sales returns)	Credit Debtors control	Credit Debtors control		
	Debit Trading stock			
	Credit Cost of sales			

LEDGER ACCOUNTS:

Trading stock	R30 000
Initial stock / Opening stock	?
Final stock / Closing stock	35 000
Purchases account	300 000
Carriage on purchases	25 000
Sales	400 000
Creditors allowances	20 000

Required: The following ledger accounts of GG stores as on 31 December, the

last day of the accounting year: Trading stock; Creditors allowances; Purchases account; Carriage on purchases and the Trading account.

ACTIVITY 1

ANSWER SHEET

GENERAL LEDGER OF GG STORES

Balance sheet accounts section

Dr		Trading stock						B9	<u>Cr</u>	
20.2 Jan.	1	Balance	b/d			20.2 Dec.	31	Opening stock	GJ	
Dec	31	Closing stock	GJ							

Dr	Creditors allowances					N15	Cr			
20.2 Dec.	31	Purchases account	b/d			20.2 Dec.	31	Balance/Total	b/d	
Dr			•	Purchas	ses	acco	unt	•	N16	Cr
20.2 Dec.	31	Balance/Total	b/d			20.2 Dec.	31	Creditors allowance	GJ	
								Trading account	GJ	
Dr			C	Carriage o	on	purch	ases	S	N17	Cr
20.2 Dec.	31	Balance/Total	b/d			20.2 Dec.	31	Trading Account	GJ	
Dr	or Opening stock							N18	Cr	
20.2 Dec.	31	Trading stock	GJ			20.2 Dec.	31	Trading Account	GJ	
Dr	r Closing stock							N19	Cr	
20.2 Dec.	31	Trading account	GJ			20.2 Dec.	31	Trading stock	GJ	

Dr		Trading account							F1	С	r
20.2 Dec.	31	Opening stock	GJ			20.2 Dec.	31	Sales (net)	GJ		
		Purchases (net)	GJ					Closing stock	GJ		
		Carriage on purchases	GJ								
		Profit & loss account (Gross profit)	GJ								

There is no cost of sales in trading account, therefore the cost of sales has to be calculated.

	R
Initial stock/Opening stock Add: Purchases (net) Add: Carriage on purchases	
Cost price of goods available to be sold Less: Final stock/Closing stock Cost of sales	()
Calaa (nat)	R
Sales (net) Cost of sales Gross profit	()

ACTIVITY 2

Calculate the cost of sales for each of the following years.

20.1 Has been done for you.

YEAR	20.1	20.2	20.3
Initial stock / Opening stock	45 000		
Purchases (net)	425 000	250 000	300 000
Carriage on purchases	10 000	NIL	15 500
Final stock / Closing stock	(30 000)	(35 000)	(20 000)
Cost of sales	450 000		

Complete the following table. Each case is independent from the previous one.

Case 1 has been done for you.

CASE	1	2	3	4
Initial stock / Opening stock	46 000	64 000	91 000	
Purchases (net)	136 000	144 000	298 000	906 000
Carriage on purchases	18 000		144 000	23 500
Cost of goods available to be sold	200 000	220 000		990 400
Final stock / Closing stock	(50 000)	(110 000)	(81 000)	
Cost of sales	150 000	110 000		910 000
Gross profit	30 000	40 000		304 000
Sales (net)	180 000	150 000	473 000	

ACTIVITY 4

You are required to draw up the following general ledger accounts of ALCAPONE CAFÉ for the year ended 31 December 20.2

- Purchases account
- f Trading account

Information:

2. Extract from the pre-adjustment trial balance on 31 December 20.2

Trading stock 1 January 20.2	R45 700
Purchases	38 400
Carriage on purchases	7 300
Debtors allowances	3 900
Creditors allowances	2 800
Sales	145 000
Carriage on sales	4 600

D/06

- 3. Adjustments and additional information:
 - 2.1 Trading stock on hand, 31 December 20.2 R32 300.
 - 2.2 Donated R200 worth of goods to local charity.
 - 2.3 The owner took R1 800 worth of stock for his own use.
 - 2.4 A debtor, B. Bush, returned goods. Selling price R1 000
 - 2.5 An amount of R100 was incorrectly recorded as a stock purchases instead of a packing material purchases.
 - 2.6 The following invoice received from Malone and Co has not yet been recorded.

	R
Merchandise	6 000
Less: Trade discount	(<u>600</u>)
	5 400
Plus: Delivery charges	200
Amount due	<u>5 600</u>

ANSWER SHEET

GENERAL LEDGER OF ALCOPONE CAFÉ

<u>Dr</u>				Purchase	es	accou		N1	Cr	<u> </u>	
20.2 Dec.	31	Balance	b/d			20.2 Dec.	31	Donations	GJ		
		Creditors control	GJ					Drawings	GJ		
								Packing material	GJ		
								Creditors allowances	GJ		
								Trading account	GJ		

Dr				F1	Cr				
20.2 Dec.	31	Opening stock	GJ		20.2 Dec.	31	Sales (net)	GJ	
		Purchases (net)	GJ				Closing stock	GJ	
		Carriage on purchases	GJ						
		Profit & loss account (Gross profit)	GJ						

No cost of sales in Trading account, therefore the cost of sales has to be calculated.

R
Initial / Opening stock
Add: Purchases (net)
Add: Carriage on purchases
Cost of goods available to be sold
Less: Final / Closing stock
Cost of sales

Sales (net)
Cost of sales
Gross Profit

INSTRUCTIONS

Analyse the following entries as indicated in the example:

Example: Purchased merchandise on credit from a wholesaler.

GENERAL LEDGER

PERPETUAL INVI	ENTORY SYSTEM	PERIODIC INVENTORY SYSTEM					
ACCOUNT TO BE DEBITED	ACCOUNT TO BE CREDITED	ACCOUNT TO BE DEBITED	ACCOUNT TO BE CREDITED				
Trading stock	Creditors control	Purchases	Creditors control				

- 4. Purchased merchandise and paid by cheque.
- 5. The owner took merchandise at cost price for personal use.
- 6. Sold goods by credit card to a customer.
- 7. Pay carriage on purchases by cheque.
- 8. Prepare a closing transfer for opening stock.
- 9. Prepare a closing transfer for closing stock.
- 10. Sold goods on account to a customer.
- 11. Prepare a journal entry for stock shortage on the last day of the financial year.

ANSWER SHEET

F	PERPETUAL INVE	NTORY SYSTEM	PERIODIC INVENTORY SYSTEM						
A	CCOUNT TO BE DEBITED	ACCOUNT TO BE CREDITED	ACCOUNT TO BE DEBITED	ACCOUNT TO BE CREDITED					
Trading stock		Creditors control	Purchases	Creditors control					
1									
2									
3									
4									
5									
6									
7									
	_		_						
8									

The following information relates to Tendem Traders.

- 1. Transactions for June 20.3
 - June 2 Purchased merchandise from Cronje Ltd and paid by cheque, R35 000.
 - Purchased merchandise on credit from Swanepoel Wholesalers for R105 000. The invoice includes delivery charges of R1 000 and a trade discount of R3 000.
 - Sold goods on credit to G. Els for R90 000, which includes a 25 % mark-up on cost price.
 - Returned merchandise to Swanepoel Wholesalers, cost price R4 000.
 - Sold goods, costing R30 000 at cost price plus 25 % for cash.
 - 28 Received merchandise back from G. Els, sold to him at R1 200.
- Additional information:

Stock on hand:

1 June 20.3 R105 000 30 June 20.3 R140 000

Required:

- □ The ledger accounts to record the above transactions in the **general ledger** (including the trading account but excluding the bank, debtors and creditors control accounts), properly balanced/closed off for June 20.3, if the **periodic inventory system** is in use.
- The ledger accounts to record the above transactions in the **general ledger** (including the trading account but excluding the bank, debtors and creditors control accounts), properly balanced/closed off for June 20.3, if the **perpetual inventory system** is in use.

ANSWER SHEET

PERIODIC INVENTORY SYSTEM

GENERAL LEDGER OF TANDEM TRADERS

Balance sheet accounts section

Dr		Trad	ing st	tock	B9	Cr		
Nomina	l accounts section	n						
Dr		Purchas	ses a	ccou	nt	N15		
			1					

Dr Carriage on purchase	es N16	Cr

Dr		Openi	ning stock N17					C)r

Dr		Closii	ng :	stock		N18	(2r
					•		•	

Dr		S	Sale	es	N19	С)r	

Dr		Debtors	s al	lowan	ces	N20			

Dr	Trading a					accour	nt	F1	(<u> Cr</u>
										-
										-

Calculation of cost of sales

	R
Opening stock	
Purchases (net)	
Carriage on purchases	
Cost price of goods available to be sold	
Closing stock	
Cost of sales	
Sales (net)	
Cost of sales	
Gross Profit	

PERPETUAL INVENTORY SYSTEM

GENERAL LEDGER OF TANDEM TRADERS

Balance sheet accounts section

Dr		Trading stock						B9	C	<u>Cr</u>
										-
										-
										-
										-
										-

Nominal accounts section

Dr	 Sa	es		N1	Cr
Dr	Cost o	f sales		N2	Cr
Dr	Debtors a	llowan	ces	N3	Cr
Dr	Trading sto	ck sur	plus	N4	Cr

Dr		rading account					F1 (

INVENTORY CONTROL SYSTEMS

ACTIVITY 1

SOLUTION

GENERAL LEDGER OF GG STORES

Balance sheet accounts section

Dr				B9		Cr					
20.2 Jan.	1	Balance	b/d	30 000	-	20.2 Dec.	31	Opening stock	GJ	30 000	-
Dec	31	Closing stock	GJ	35 000	-						

Dr				Creditors allowances							Cr	
20.2 Dec.	31	Purchases account	GJ	20 000	1	20.2 Dec.	31	Balance/Total	b/d	20 000	1.1	Ì

Dr		Purchases account								Cr	
20.2 Dec.	31	Balance/Total	b/d	300 000	-	20.2 Dec.	31	Creditors allowances	GJ	20 000	-
								Trading account	GJ	280 000	-
				300 000	-					300 000	-

Dr	Carriage on purchases								N17	(Or_	
20.2 Dec.	31	Balance/Total	b/d	25 000	-	20.2 Dec.	31	Trading account	GJ	25 000	-	

Dr			Opening stock							C) r
20.2 Dec.	31	Trading stock	GJ	30 000	i	20.2 Dec.	31	Trading Account	GJ	30 000	-

Dr	-	_	-	Closing stock)r
20.2						20.2					
Dec.	31	Trading account	GJ	35 000	-	Dec.	31	Trading stock	GJ	35 000	-

Dr		Trading account								(Cr_
20.2 Dec.	31	Opening stock	GJ	30 000	-	20.2 Dec.	31	Sales (net)	GJ	400 000	-
		Purchases (net)	GJ	280 000	-			Closing stock	GJ	35 000	-
		Carriage on purchases	GJ	25 000	1						
		Profit & loss account (Gross profit)	GJ	100 000	-						
				435 000	-					435 000	-

	R
Initial stock/Opening stock	30 000
Add: Purchases (net)	280 000
Add: Carriage on purchases	<u>25 000</u>
Cost price of goods available to be sold	335 000
Less: Final stock/Closing stock	(<u>35 000</u>)
Cost of sales	<u>300 000</u>
Sales (net)	400 000
Cost of sales	(<u>300 000</u>)
Gross profit	100 000

ACTIVITY 2

SOLUTION

YEAR	20.1	20.2	20.3
Opening stock	45 000	30 000	35 000
Purchases (net)	425 000	250 000	300 000
Carriage on purchases	10 000	NIL	15 500
Closing stock	(30 000)	(35 000)	(20 000)
Cost of sales	450 000	245 000	330 500

SOLUTION

CASE	1	2	3	4
Initial stock / Opening stock	46 000	64 000	91 000	60 900
Purchases (net)	136 000	144 000	298 000	906 000
Carriage on purchases	18 000	12 000	144 000	23 500
Cost of goods available to be sold	200 000	220 000	533 000	990 400
Final stock / Closing stock	(50 000)	(110 000)	(81 000)	(80 400)
Cost of sales	150 000	110 000	452 000	910 000
Gross profit	30 000	40 000	21 000	304 000
Sales (net)	180 000	150 000	473 000	1 214 000

SOLUTION

GENERAL LEDGER OF ALCOPONE CAFÉ

Dr	Purchases ac								N1	Cr	
20.2 Dec.	31	Balance	b/d	38 400	-	20.2 Dec.	Donations	GJ	200	_	
		Creditors control	GJ	5 400	-			Drawings	GJ	1 800	-
								Packing material	GJ	100	-
								Creditors allowances	GJ	2 800	-
								Trading account	GJ	38 900	-
				43 800	-					43 800	-

Dr				F1 Cr							
20.2 Dec.	31	Opening stock	GJ	45 700	-	20.2 Dec.	31	Sales (net)	GJ	140 100	-
		Purchases (net)	GJ	38 900	-			Closing stock	GJ	32 300	-
		Carriage on purchases	GJ	7 500	-						
		Profit & loss account (Gross profit)	GJ	80 300	-						
				172 400	-					172 400	-

	R
Initial / Opening stock	45 700
Add: Purchases (net)	38 900
Add: Carriage on purchases	<u>7 500</u>
Cost of goods available to be sold	92 100
Less: Final / Closing stock	(<u>32 300</u>)
Cost of sales	59 800
Sales (net)	140 100
Cost of sales	(<u>59 800</u>)
Gross profit	80 300

SOLUTION

GENERAL LEDGER

F	PERPETUAL INVE	NTORY SYSTEM	PERIODIC INVE	C INVENTORY SYSTEM				
A	CCOUNT TO BE DEBITED	ACCOUNT TO BE CREDITED	ACCOUNT TO BE DEBITED	ACCOUNT TO BE CREDITED				
Tra	ading stock	Creditors control	Purchases	Creditors control				
1	Trading stock	Bank	Purchases	Bank				
2	Drawings	Trading stock	Drawings	Purchases				
3	Bank	Sales	Bank	Sales				
	Cost of sales	Trading stock						
4	Trading stock	Bank	Carriage on purchases	Bank				
5			Trading account	Opening stock				
6			Closing stock	Trading account				
7	Debtors control	Sales	Debtors control	Sales				
	Cost of sales	Trading stock						
8	Trading stock deficit	Trading stock						

SOLUTION

PERIODIC INVENTORY SYSTEM

GENERAL LEDGER OF TANDEM TRADERS

Balance sheet accounts section

Dr				Trad	ing	stock			B9		<u>Cr</u>
20.3 June	1	Balance	b/d	105 000	-	20.3 June	1	Opening stock	GJ	105 000	-
	30	Closing stock	GJ	140 000	-						

Dr	Purchases account								N15	(2r_
20.3 June	2	Bank	CPJ	35 000	1	20.3 June	14	Creditors control	CAJ	4 000	-
	7	Creditors control	CJ	103 000	-		30	Trading account	GJ	134 000	-
				138 000	1					138 000	-

וט	I		Carnage on			purchases			1410	UI_		
	20.3 lune	7	Creditors control	CJ	1 000	-	20.3 June	30	Trading account	GJ	1 000	-
											•	

Dr		Opening stock								Cr	
20.3 June	1	Trading stock	GJ	105 000	-	20.3 June	30	Trading account	GJ	105 000	-

Dr			Closing stock						N18	(2r_
20.3 June	30	Trading account	GJ	140 000	1	20.3 June	30	Trading stock	GJ	140 000	-

Dr				S		N19	C	رار ر			
20.3 June	30	Debtors allowances	GJ	1 200	-	20.3 June	10	Debtors control	GJ	90 000	-
		Trading account	GJ	126 300	-		23	Bank	CRJ	37 500	-
				127 500	-					127 500	-

Dr	Debtors allowances							N20	C	r		
20.3 June	28	Debtors control	DAJ	1 200	-	20.3 June	30	Sales	GJ	1 200	1	

Dr				Tradir		F1		<u> Cr</u>			
20.3 June	30	Opening stock	GJ	105 000	-	20.3 June	30	Sales	GJ	126 300	-
		Purchases	GJ	134 000	-			Closing stock	GJ	140 000	-
		Carriage on purchases	GJ	1 000	-						
		Profit and loss	GJ	26 300	-						
				266 300	-					266 300	-

Calculation of cost of sales

	R
Opening stock	105 000
Purchases (net)	134 000
Carriage on purchases	<u>1</u> 000
Cost price of goods available to be sold	240 000
Closing stock	(<u>140</u> <u>000</u>)
Cost of sales	<u>100</u> <u>000</u>
Sales (net)	126 300
Cost of sales	(<u>100</u> <u>000</u>)
Gross Profit	<u> 26 300</u>

PERPETUAL INVENTORY SYSTEM

GENERAL LEDGER OF TANDEM TRADERS

Balance sheet accounts section

Dr		Trading stock								(Cr_
20.3 June	1	Balance	b/d	105 000	-	20.3 June	10	Cost of sales	DJ	72 000	-
	2	Bank	СРЈ	35 000	-		14	Creditors control	CAJ	4 000	-
	7	Creditors control	CJ	104 000	-		23	Cost of sales	CRJ	30 000	-
	28	Cost of sales	DAJ	960	-		30	Balance	c/d	140 000	-
	30	Trading stock surplus	GJ	1040	-						
				246 000	-					246 000	-
July	1	Balance	b/d	140 000	-						

Dr	Sales									C	Cr_
20.3 June	30	Debtors allowances	GJ	1 200	1	20.3 June	10	Debtors control	DJ	90 000	-
		Trading account	GJ	126 300	-		23	Bank	CRJ	37 500	-
				127 500	-					127 500	-

Dr		_	N2	C	r						
20.3 June	10	Trading stock	GJ	72 000	-	20.3 June	28	Trading stock	DAJ	960	-
	23	Trading stock	CRJ	30 000	-		30	Trading account	GJ	101 040	-
				102 000	-					102 000	-

Dr	-	-	Debtors allowances				ces		N3	C	Cr
20.3 June	28	Debtors control	DAJ	1 200	-	20.3 June	30	Sales	GJ	1 200	1

Dr				Trading stock surplus				N4		Cr	
20.3 June	30	Profit and loss	GJ	1 040	1	20.3 June	30	Trading stock	GJ	1 040	1

Dr		Trading account							F1	Cr	
20.3 June	30	Cost of sales	GJ	101 040	-	20.3 June	30	Sales	GJ	126 300	-
		Profit and loss	GJ	25 260	-						
				126 300	-					126 300	-